Peripartal metabolic adaptations in naturally scrapie-infected and healthy ewes

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Hypothesis

Biochemical changes in blood metabolites due to peripartal adaptations might differ between naturally scrapie-infected and healthy ewes.

CONCLUSIONS

✓ Pre-clinical prion disease hardly affected blood substrates around lambing.

MATERIAL AND METHODS

Animals

• Rasa Aragonesa ewes (n=22, BCS= 3.2) naturally scrapie-infected (S; in vivo diagnosed by rectal biopsy and confirmed post-mortem) or healthy (H) were controlled during the transition period.

Measurements and analysis

• Blood samples were collected at weeks -2, +1 and +2 relative to lambing to determine plasma triglycerides (TRIG), cholesterol (CHOL), non-esterified fatty acids (NEFA), ß-hydroxybutyrate (BHB) and urea.

RESULTS

Disease effect:

• Plasma TRIG, CHOL, BHB and urea did not differ between S and H (P>0.05).

• Plasma NEFA were lower in S-carrying twins than in their H counterparts

Number of foetus x Week effect:

Week effect:

Within each parameter, different letter denote statistical differences (P<0.05).

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